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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/821,455	04/09/2004	Roger Akers	SYNT-P006US	1352
7590 07/26/2006 Elizabeth R. Hall & Associates, P.C. 1722 Maryland Street Houston, TX 77006-1718			EXAMINER BEISNER, WILLIAM H	
			ART UNIT 1744	PAPER NUMBER

DATE MAILED: 07/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/821,455

Applicant(s)

AKERS ET AL.

Examiner

William H. Beisner

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 May 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 14-19 is/are allowed.
- 6) ☒ Claim(s) 1-4 and 6-13 is/are rejected.
- 7) ☒ Claim(s) 5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Heskett (US 5,415,770).

With respect to claim 1, the reference of Heskett discloses a device that is structurally the same as that instantly claimed. The device includes a fluid inlet (64); a first compartment (62) having a tubular housing (68) of a fluid impermeable material and first and second opposed ends (See Figure 3). The device includes a first end piece (70) attached to the fluid inlet (64) on one side and to the tubular housing on the other side. The device includes a second compartment (16) in fluid communication with the first compartment (62) and having a proximal and distal end. The device includes a fluid connector (66) having a first side mounted on the second end of the tubular housing and a second side mounted on the proximal end of the second compartment (16) and having a bore (72) passing from the first side to the second side of the connector. The device includes a connector filter (76) having a first end and a second end and wherein the first end is mounted on the first side of the fluid connector (66) and the filter (76) is positioned to filter a fluid stream passing out of the first compartment (62) into the through bore (72) and into the second compartment (16). The device includes a fluid outlet (14); a distal end piece (24)

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mounted on the distal end of the second compartment (16) and connected to the fluid outlet (14); and an outlet filter (18, 26, 28) mounted on a proximal side of the distal end piece (24).

With respect to claim 2, the connector filter has a surface area that covers the through bore (72) of the fluid connector.

With respect to claim 3, the outlet filter (18,26,28) traverses the second compartment (16) and has a second end (26) mounted on the second side of the fluid connector (66).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out

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the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 4 and 6-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heskett (US 5,415,770).

The reference of Heskett has been discussed above.

Claim 4 differs by reciting that the connector filter includes a molecular weight cut-off membrane.

While the reference of Heskett is silent as to the properties of the filter (76), in the absence of a showing of criticality and/or unexpected results, it would have been obvious to one of ordinary skill in the art to determine the properties of the filter based merely on the specifics of the fluid to be filtered.

With respect to claim 6, in the absence of a showing of criticality and/or unexpected results, it would have been obvious to one of ordinary skill in the art to provide the fluid connector (66) with an inlet for the known and expected result of allowing a fluid to be introduced in the second chamber without contacting the first chamber.

With respect to claims 7-9, the use of fill ports and/or vent portion with respect to either of the compartments would have been well within the purview of one having ordinary skill in the art for the known and expected result of allowing materials to be introduced and/or removed from the compartments without disassembly of the compartments.

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With respect to claim 10, the use of a drive assembly to rotate the compartments would have been within the purview of one having ordinary skill in the art for ensuring that the contact material is evenly distributed within the compartment.

With respect to claim 11, in the absence of a showing of criticality and/or unexpected results, it would have been obvious to one of ordinary skill in the art to determine the optimum volumes of the compartments based merely on the purification method to be performed while maintaining the efficiency of the purification system.

With respect to claims 11 and 12, the use of bar codes for the identification of parts is known in the art for inventory control and/or product identification and would have been well within the purview of one having ordinary skill in the art for identification of the components of the purification system.

Allowable Subject Matter

7. Claim 5 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. Claims 14-19 allowed.

9. The following is a statement of reasons for the indication of allowable subject matter:

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The prior art of record fails to teach or fairly suggest modification of the structure of the reference of Heskett (US 5,415,770) such that the outlet filter includes the claimed support cylinder, membrane and chamber formed there between.

Response to Arguments

10. With respect to the rejection of Claims 14-18 under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement, this rejection has been withdrawn in view of applicants' amendments to the claims and related comments (See page 7 of the response dated 5/5/06).

11. With respect to the rejection of Claims 1-4 and 7-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Masahide et al.(JP 06-134210), this rejection has been withdrawn in view of applicants' amendments to the claims and related comments (See pages 7-9 of the response dated 5/5/06). Note a new grounds of rejection has been made to claims 1-4 and 7-9 over the reference of Heskett (US 5,415,770).

12. With respect to the rejection of Claims 5 and 19 under 35 U.S.C. 103(a) as being unpatentable over Masahide et al.(JP 06-134210) in view of Schwarz et al.(US 5,026,650), this rejection has been withdrawn in view of applicants' amendments to the claims and related comments (See pages 9-11 of the response dated 5/5/06).

Conclusion

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13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William H. Beisner whose telephone number is 571-272-1269. The examiner can normally be reached on Tues. to Fri. and alt. Mon. from 6:15am to 3:45pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys J. Corcoran can be reached on 571-272-1214. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



William H. Beisner
Primary Examiner
Art Unit 1744

WHB